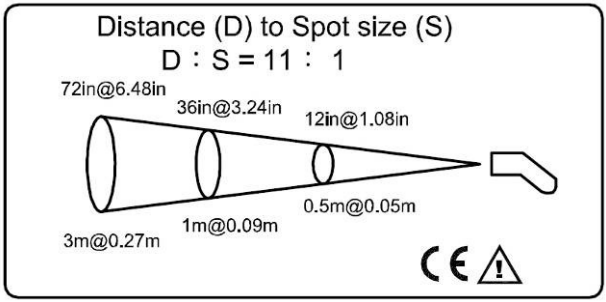
Infrared Thermometer
SCANTEMP 440

User manual

INTRODUCTION

The ScanTemp440 infrared thermometer is a non-contact infrared thermometer with Thermocouple connector. For the infrared part, simply aim the thermometer at the target and press the measurement button to display the surface temperature in less than a second. Plug in the specific thermocouple (not included), ScanTemp440 may take contact temperature as high as 1400 °C.

The distance to target diameter ratio (field of view) is 11:1. For accurate reading, please make sure the target size is smaller than the spot size.


Distance (D) to Spot size (S)
D : S = 11 : 1
72in@6.48in
36in@3.24in
12in@1.08in
0.5m@0.05m
1m@0.09m
3m@0.27m

FEATURES

- Long Battery Life
- Use the most affordable and available battery: AA size, instead of the low capacity 9V battery
- Large LCD Screen, with bright amber color Backlight
- Friendly User Interface: 4-Key with trigger
- with high-end arithmetic: Max; Min and DIF; AVG mode
- Auto Power Off in 1 minutes
- Precision K type Thermocouple Thermometer inside

SAFETY CAUTIONS

⚠EMC/RFI

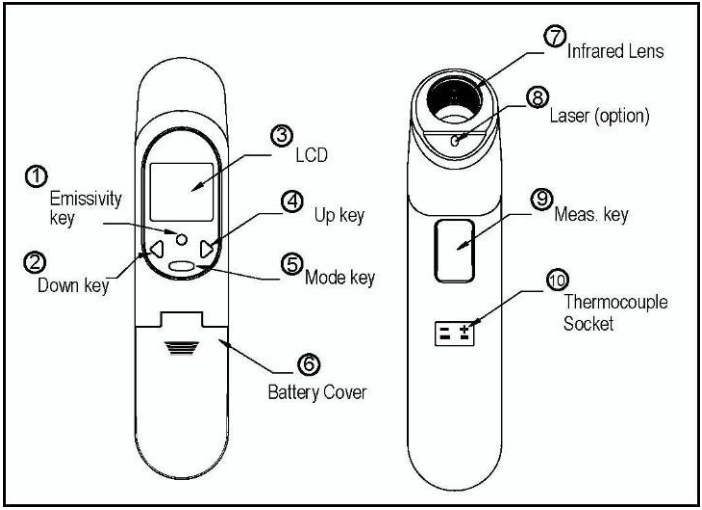
Readings may be affected if the device is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

CAUTION
LASER RADIATION-DO NOT STARE INTO BEAM
CLASS II LASER PRODUCT
CAUTION-CLASS 2
LASER RADIATION WHEN OPEN
Max. Output<1mW, Wavelength : 635-650nm
Complies with 21 CFR, Chapter 1, subchapter J
LASER RADIATION
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

- Never point the device towards anyone's eyes.
- Keep away from baby and children.
- Do not leave the device near objects of high temperature.
- After measure high temp, the probe may remain HOT for a while.
- Do not submerge any part of the ScanTemp 440.
- The thermometer is NOT watertight. Please keep the unit dry and away from water.

PARTS DESCRIPTION

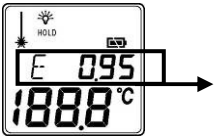
∗ Simply aim the ScanTemp440 at the measure target and press the Meas. key to display the surface temperature.



The Default Screen as follow:

OPERATING INSTRUCTIONS

Infrared Function



ScanTemp440 is supplied with a default emissivity of 0.95.

→ Press Mode key(5) for scrolling more display function as follows.

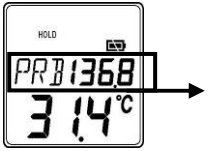
E	Press emissivity key (1) key to **adjust the emissivity.** The emissivity can be changed from 0.10 to 1.00.
MAX	Keep press Mode key(5) key for the Maximum (MAX), Minimum (MIN), Different between MAX and MIN (DIF) and Average (AVG) readings during the last measurement period.
MIN	
dIF	
AVG	
HAL	Press Down key(2) or Up key to change the **High Alarm (HAL)** or **Lo Alarm (LAL).** For example: When the reading 27 °C < LAL 27.1 °C, the Low icon will flash and you will hear a beep sound.
LAL	
# The measurement range: -60 to +500 °C.	

ScanTemp will automatically shut off if left idle for more than 60 sec, unless in PRB mode.

OPERATING INSTRUCTIONS

Thermocouple Probe Scan Function

Press the mode key(8) until PRB appears: on the LCD.



Connect the thermocouple with ScanTemp440's thermocouple socket(10) and put the probe in or on the target, the temperature will be displayed beside the "PRB" icon.

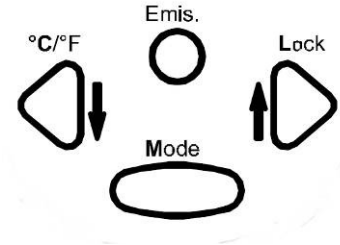
PRB	This mode can only be reference when thermometer probe is connected.
# The measurement range: -64 to +1400 °C.	

ScanTemp440 will automatically shut off if left idle for more than 12 min in PRB mode.

⚠ After measure high temp, the probe may remain HOT for a while.

OPERATING INSTRUCTIONS

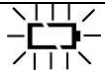
Other Function



In Default, Max, Min, DIF, AVG, PRB mode:	Press Lock key for infrared **LOCK mode** ON/OFF.
	Press °C/°F key for **°C** or **°F transferred.**
In all modes: First hold on the Meas. key	Press Lock key for **Backlight function** ON/OFF.
	Press °C/°F key for **laser function** ON/OFF.

BATTERY

The ScanTemp440 incorporates visual low battery indication as follows:

Battery OK	Battery Low	 Battery Exhausted
Measurements are possible	Battery needs to be replaced, measurements are still possible	Measurements are not possible

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with two AA, 1.5V batteries. **Please note: It is important to turn the instrument off before replacing the battery otherwise the ScanTemp440 may malfunction.**

⚠ Dispose of used battery promptly and keep away from children.

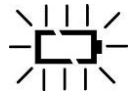
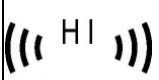
Cleaning and Storage

☑ The ScanTemp440 should be stored at room temperature between –20 to +65°C.

☑ The lens should be kept clean at all times.

The sensor lens is the most delicate part of the ScanTemp. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol, allowing the lens to fully dry before using the ScanTemp440.

TROUBLE SHOOTING

LCD display	Problem & Solution
	'Low Battery' icon indicates the battery is low. ➔ The battery should be replaced with two AA(LR6), 1.5V batteries immediately.
don't work	➔ Please check the model with/without this function. ➔ Replace the battery.
	'Hi' is displayed when the temperature being measured is outside of the settings of HAL. ➔ Please reset the HAL or select target within specifications.
	'Lo' is displayed when the temperature being measured is outside of the settings of LAL. ➔ Please reset the LAL or select target within specifications.
	For all other error messages it is necessary to reset the ScanTemp440. ➔ To reset the ScanTemp440, please wait the instrument automatic off, remove the battery and wait for a minimum of one minute, reinsert the battery and turn on. ➔ If the error message remains please contact the Service Department for further assistance.

SPECIFICATIONS

Item	Infrared Scan function	Thermocouple Probe Scan function
Measurement Range	-60 to +500 °C (-76 to +932 °F)	-64 to +1400 °C (-83.2 to +2552 °F)
Infrared Accuracy	±2% of reading or ±2 °C which is greater	±1% of reading or ±1 °C which is greater
Operating Range	0 to +50 °C (32 to 122°F)	
Storage Range	-20 to +65 °C (-4 to 149°F), 95%RH	
Response Time	1sec	
Distance to Spot size	5:1	
Emissivity	0.10~1.00 step0.01	
Update Frequency	1.4Hz	
Mode	MAX, MIN, dIF, AVG, HAL, LAL, PRB, Lock	
Battery Life	Typ.360, min 270 hours continuous use*	
Dimensions	30 x 42.9 x 138 mm	
Weight	137 grams including batteries (AA*2pcs)	

* without Laser and Back Light.

Note: Subject to change without notice.